

projected by the projection lens of the projector, said projected image is a duplicate of the luminous input flux with a higher and more uniform luminance,

wherein the light valve of the projector is located roughly at a focus point of the illumination lens.

2. The display according to claim 1, wherein the light source array is located roughly at the opposite focus point of the illumination lens from the focus point on which the light valve is located.

3. The display according to claim 1, wherein the light valve is positioned between the illumination lens and the focus point  $f$  of the illumination lens with a deviation in the range of  $\pm 25\%$  away from the focus point.

4. A display comprising:

a projector including a light source extending at least one-dimensionally or two-dimensionally, an illumination lens through which a luminous input flux emitted from the light source passes, a light valve for modulating the luminous input flux passed through the illumination lens, and a projection lens for projecting the luminous input flux modulated at the light valve; and

a screen for displaying a projected image projected by the projection lens of the projector,

wherein the light valve of the projector is located roughly at a focus point of the illumination lens, and

wherein in the case where the area of the light source is large, satisfying the relationship of the following expression (7):

$$W > 1.2f/F_n \quad (7)$$

where  $F_n$  denotes the F-number of the projection lens,  $f$  denotes the focal length of the illumination lens, and  $W$  denotes the diameter of the light source, the light source is positioned at a distance in the range of from zero to 3.5 times the focal length  $f$  of the illumination lens away from the illumination lens.

5. A display comprising:

a projector including a light source extending at least one-dimensionally or two-dimensionally, an illumination lens through which a luminous input flex emitted from the light source passes, a light valve for modulating the luminous input flex passed through the illumination lens, and a projection lens for projecting the luminous input flex modulated at the light valve; and

a screen for displaying a projected image projected by the projection lens of the projector,

wherein the light valve of the projector is located roughly at a focus point of the illumination lens, and

wherein in the case where the area of the light source is small, satisfying the relationship of the following expression (8):

$$W \leq 1.2f/F_n \quad (8)$$

where  $F_n$  denotes the F-number of the projection lens,  $f$  denotes the focal length of the illumination lens, and  $W$  denotes the diameter of the light source, the light source is positioned at a distance of the focal length  $f$  of the illumination lens with a deviation in the range of from -40% to +80% away from the illumination lens.

6. The display according to claim 1, wherein the light source array comprises light-emitting diodes arranged in a one-dimensional or two-dimensional array.

7. The display according to claim 1, wherein the screen is formed to diffuse reflection thereon.

8. A display comprising:

a projector including a light source extending at least one-dimensionally or two-dimensionally, an illumination lens through which a luminous input flex emitted from the light source passes, a light valve for modulating the luminous input flex passed through the illumination lens, and a projection lens for projecting the luminous input flex modulated at the light valve; and

a screen for displaying a projected image projected by the projection lens of the projector,

wherein the light valve of the projector is located roughly at a focus point of the illumination lens,

wherein the light source is located roughly at the opposite focus point of the illumination lens from the focus point on which the light valve is located, and

wherein the following expression is satisfied:

$$\alpha H \geq \arctan (dH/2f) ,$$

where dH denotes the horizontal width of the light valve, f denotes the focal length of the illumination lens, and  $\alpha H$  denotes the angle of radiation in the horizontal direction at each point of the light source.

9. A display comprising:

a projector including a light source extending at least one-dimensionally or two-dimensionally, an illumination lens through which a luminous input flex emitted from the light source passes, a light valve for modulating the luminous input flex passed through the illumination lens, and a projection lens for projecting the luminous input flex modulated at the light valve; and

a screen for displaying a projected image projected by the projection lens of the projector,

wherein the light valve of the projector is located roughly at a focus point of the illumination lens,

wherein the light source is located roughly at the opposite focus point of the illumination lens from the focus point on which the light valve is located, and

wherein the following expression is satisfied:

$$\alpha V \geq \arctan (dV/2f) ,$$

where dV denotes the vertical width of the light valve, f denotes the focal length of the illumination lens, and  $\alpha V$  denotes the angle of radiation in the vertical direction at each point of the light source.

10. The display according to claim 2, wherein the light source array comprises light-emitting diodes arranged in a one-dimensional or two-dimensional array.

11. The display according to claim 2, wherein the screen is formed to diffuse reflection thereon.

12. A stereoscopic display comprising:

a left and right pair of projectors each including a light source array extending at least one-dimensionally or two-dimensionally for providing an input image composed by a luminous input flex emitted therefrom, an illumination lens through which the luminous input flex emitted from the light source array passes, a light valve formed and positioned relative to the illumination lens and the light source array to pass the luminous input flex passed through the illumination lens therein, and a projection lens for projecting the luminous input flex modulated at the light valve; and

a screen for overlappingly displaying respective projected images composed by the respective luminous input flex projected by the respective projection lenses of each of the pair of the projectors, each of said projected images is a duplicate of the luminous input flux with a higher and more uniform luminance,

wherein the light valve of each of the projectors is located roughly at a focus point of the illumination lens.

13. The display according to claim 12, wherein the light valve is positioned between the illumination lens and the focus point  $f$  of the illumination lens with a deviation in the range of  $\pm 25\%$  away from the focus point.

14. A stereoscopic display comprising:

a left and right pair of projectors each including a light source extending at least one-dimensionally or two-dimensionally, an illumination lens through which a luminous input flex emitted from the light source passes, a light valve for modulating the luminous input flex passed through the illumination lens, and a projection lens for projecting the luminous input flex modulated at the light valve; and

a screen for displaying respective projected images projected by the projection lenses of the pair of the projectors on the same panel,

wherein the light valve of each of the projectors is located roughly at a focus point of the illumination lens, and

wherein in the case where the area of the light source is large, satisfying the relationship of the following expression (7):

$$W > 1.2f/F_n \quad \cdots (7)$$

where  $F_n$  denotes the F-number of the projection lens,  $f$  denotes the focal length of the illumination lens, and  $W$  denotes the diameter of the light source, the light source is positioned at a distance in the range of from zero to 3.5 times the focal length  $f$  of the illumination lens away from the illumination lens.

15. A stereoscopic display comprising:

a left and right pair of projectors each including a light source extending at least one-dimensionally or two dimensionally, an illumination lens through which a luminous input flex emitted from the light source passes, a light valve for modulating the luminous input flex passed through the illumination lens, and a projection lens for projecting the luminous input flex modulated at the light valve; and

a screen for displaying respective projected images projected by the projection lenses of the pair of the projectors on the same panel,

wherein the light valve of each of the projectors is located roughly at a focus point of the illumination lens, and

wherein in the case where the area of the light source is small, satisfying the relationship of the following expression (8):

$$W \leq 1.2f/F_n \quad \cdots (8)$$

where  $F_n$  denotes the F-number of the projection lens,  $f$  denotes the focal length of the illumination lens, and  $W$  denotes the diameter of the light source, the light source is positioned at a distance of the focal length  $f$  of the illumination lens with a deviation in the range of from -40% to +80% away from the illumination lens.

16. A stereoscopic display comprising:

a left and right pair of projectors each including a light source extending at least one-dimensionally or two-dimensionally, an illumination lens through which a luminous input flex emitted from the light source passes, a light valve for modulating the luminous input flex passed through the illumination lens, and a projection lens for projecting the luminous input flex modulated at the light valve; and


a screen for displaying respective projected images projected by the projection lenses of the pair of the projectors on the same panel,

wherein the light valve of each of the projectors is located roughly at a focus point of the illumination lens, and

wherein the following expression is satisfied:

$$\alpha \geq V \arctan (dV/2f) ,$$

where  $dV$  denotes the vertical width of the light valve,  $f$  denotes the focal length of the illumination lens, and  $\alpha V$  denotes the angle of radiation in the vertical direction at each point of the light source.

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17. The display according to claim 12, wherein the screen is formed to diffuse reflection thereon.
  18. The display according to claim 10, wherein the light-emitting diodes constituting the light source array are arranged at least in two or more different directions in combination.
  19. A display comprising the projector according to claim 10, wherein the screen is formed to diffuse reflection thereon.
  20. A display comprising the projector according to claim 18, wherein the screen is formed to diffuse reflection thereon.
  21. The display according to claim 20, wherein the screen comprises a corner reflector, and an anisotropic diffusion means for causing wider diffusion in a direction parallel to a ridgeline of the corner reflector than in a vertical direction.

Please add new claims as follows:

23. The display according to claim 1, wherein a width of the light valve is formed according to a focal length from the illumination lens to the light valve, and an angle of radiation at each point of the light source array measured in parallel with a direction of the width of the light valve.

24. The display according to claim 1, wherein a diameter of the light source array is formed according to a focal length from the illumination lens to the light valve, and an F-number of the projection lens.
25. The display according to claim 1, wherein the light valve is shaped in rectangle.
26. The display according to claim 12, wherein a width of each light valve is formed according to a focal length from the illumination lens to the light valve, and an angle of radiation at each point of the light source array measured in parallel with a direction of the width of the light valve.
27. The display according to claim 12, wherein a diameter of each light source array is formed according to a focal length from the illumination lens to the light valve, and an F-number of the projection lens.
28. The display according to claim 12, wherein each light valve is shaped in rectangle.
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